(471)

XXVII. Notes and Descriptions of Pterophoridæ and Orneodidæ. By E. MEYRICK, B.A., F.R.S., F.Z.S.

[Read December 4th, 1907.]

THE following notes may be regarded as materials towards the study of the geographical distribution of these curious families, which is likely to prove eventually of much interest.

PTEROPHORIDÆ.

DIACROTRICHA, Z.

Having become acquainted with *D. fasciola*, the species to which Zeller attached this generic name, I find it agrees with my genus *Cosmoclostis* in essential characters, and therefore propose to adopt Zeller's name for that genus. Including Zeller's, four species have been described, ranging from Ceylon to Queensland, and I now add a fifth.

Diacrotricha fasciola, Z.

Described from Java; I have it also from Ceylon, India, and the Kei Islands. Bred by Mr. H. Maxwell-Lefroy from pupæ found on leaf of *Averrhoa bilimbi* (?), a tree of cultivation, so that it may be artificially spread.

Diacrotricha auxileuca, n. sp.

 3° Q. 14-18 mm. Head and thorax white partially suffused with whitish-yellow. Palpi and antennæ ochreous-whitish. Abdomen whitish-yellow, irregularly marked with ferruginous, with three silvery-white transverse bands, beneath wholly white. Legs white, indistinctly banded with ferruginous-ochreous, anterior and middle tibiae lined with dark fuscous. Fore-wings cleft from $\frac{1}{3}$, segments linear; snow-white; costa slenderly ferruginous-brown from base to cleft, and anterior half of first segment more or less entirely suffused with ferruginous-brown; dorsum also partially ferruginous; first segment with a dark fuscous dot at base of its lower margin, two dark fuscous marks on costa before and at middle, suffusedly connected beneath, a bar at $\frac{3}{4}$, and a dot at apex; second segment with a ferruginous bar mixed with dark fuscous almost at base, a narrow dark fuscous bar beyond middle, and a dot at apex : cilia ochreous,

TRANS. ENT. SOC. LOND, 1907.—PART IV. (FEB. '08)

at apex of segments suffused with fuscous. Hind-wings cleft firstly from r_{27} , secondly almost from base; grey more or less mixed with whitish, sometimes with distinct white subapical bands on segments; cilia ochreous, tinged with grey.

ASSAM (Khasi Hills), in March; three specimens. Allied to *D. aglaodesma*, but easily distinguished by the different markings of second segment of fore-wings.

TRICHOPTILUS, Wals.

I am indebted to Mr. T. Bainbrigge Fletcher for calling my attention to the fact that in my published description of this genus I have misinterpreted the neuration of the fore-wings; owing to the slenderness of the segments the veins are difficult to follow out to their termination, but I am nów satisfied that 7 is always present (not absent as stated), 9 absent, 10 out of 8 or absent, 11 short, separate or out of 8 near base. Unfortunately I am not acquainted with the type of this genus, *T. pygmæus*, though I possess all the other described species.

Trichoptilus pelias, n. sp.

3 9. 12 mm. Head and thorax pale greyish-ochreous. Palpi pale greyish-ochreous, sprinkled with whitish and dark grey. Antennæ white lined with black. Abdomen pale greyish-ochreous dorsally suffused with fuscous, base white, third segment with a pale ochreous arrow-head on back, mixed with blackish on sides, fourth segment much mixed with blackish. Legs white lined with black, posterior pair white banded with greyish-ochreous. Fore-wings cleft from before middle, segments linear; pale whitish-ochreous irrorated with ochreous-grey; a small black dot beneath costa near base, one in disc at $\frac{1}{3}$, and one above base of cleft; narrow distinct white bands on first segment at about $\frac{1}{3}$ and $\frac{2}{3}$ of length : cilia grey somewhat mixed with white scales, on first segment with several small groups of black scales on posterior half of lower margin, on second with some black scales towards middle of upper margin, and two or three black scales near and beyond middle of dorsum. Hindwings cleft firstly from 1, secondly from near base, segments linear; dark grey; cilia grey, on dorsum with a well-marked black scaleprojection in middle, and a very small one almost at apex.

COORG (3,500 feet), in January (*Newcome*); ASSAM (Khasi Hills), in November; two specimens.

472

Trichoptilus congrualis, Walk.

(Pterophorus congrualis, Walk. 943; P. oxydactylus, ib. 944; Trichoptilus centetes, Meyr., Trans. Ent. Soc. Lond., 1886, 16; ? T. compsocharcs, ib. 16; T. ralumensis, Pag., "Zoologica," xxix, 239; T. ochrodactylus, Fish, Can. Ent. xiii, 142.)

This very wide-ranging species occurs freely in South and East Africa, from India and Ceylon to New Guinea and N.E. Australia, and in the West Indies and Southern States of North America (I have several specimens from Florida).

DEUTEROCOPUS, Z.

Deutcrocopus rubrodactylus, Pag.

I have this from South Africa, Ceylon, India, New Guinea and the surrounding islands.

Deuterocopus planeta, n. sp.

3. 10-11 mm. Head and thorax deep ferruginous, sprinkled with yellow-whitish. Palpi ferruginous, with several whitish rings. Antennæ whitish, with a biserrate fuscous line. Abdomen whitishvellow, above with three suffused stripes and several transverse bands ferruginous, third segment with a semicircular silvery-white spot on posterior margin, anal valves and tuft very long and slender. Legs ferruginous ringed with whitish, posterior pair with whorls of expanded scales at origin of spurs and apex of tarsal joints. Fore-wings cleft firstly from 2, secondly from 2, first segment narrow, second and third linear; deep ferruginous, sprinkled with whitish-yellowish; undefined slender irregular white bars on first segment before 1 and beyond 2, before base of second cleft, and on middle of second segment : cilia pale ferruginous, on costa mostly dark fuscous, with dark fuscous bars at apex of segments, and dark grey patches or bars on lower margin of first segment towards apex, upper margins of second and third segments towards apex, and lower margins of second and third segments about middle. Hind-wings cleft firstly from 1, secondly from near base, segments linear ; ferruginous, first two segments suffused with dark fuscous posteriorly; cilia light ferruginous, third segment with a dot of one or two black scales on dorsum before its middle, and a moderate apical scale-tooth of black and ferruginous scales extending above and beneath.

COORG (Kuti) (Newcome), ASSAM (Khasi Hills); in

October and November; two specimens. Very similar to *rubrodactylus*, but the silvery-white spot on abdomen is an easy distinction. In *D. ritsemæ*, Wals., the abdomen is also marked with white, but differently, according to the description.

Deuterocopus Tengstræmi, Z.

Described from Java; I have it also from Assam and the Kei Islands; specimens from the latter group are much more suffused with ferruginous than those from Assam, in which the white colouring is more extensive, but they do not seem otherwise distinct.

Deuterocopus famulus, n. sp.

9.15 mm. Head, palpi, and antennæ dark coppery-fuscous with a few white scales. Antennæ dark fuscous. Abdomen blackishfuscous, first segment white except a dorsal stripe, second segment wholly ochreous-white, third ochreous-white on sides, ventral surface wholly ochreous-white. Legs dark coppery-fuscous, anterior and middle pairs lined and sprinkled with white, posterior tibiæ banded with white, with expansible whorls of scales on origin of spurs (tarsi broken). Fore-wings cleft firstly from before 3, second segment cleft from its middle; dark prismatic coppery-fuscous; a few irregularly scattered white scales : cilia fuscous, towards apex of segments suffused with dark fuscous, beneath apex of first and second segments with a slender white bar, on dorsum with a white space extending from middle to 3, including a central fuscous bar. Hindwings cleft firstly from $\frac{2}{5}$, secondly from $\frac{1}{5}$, segments slender; dark fuscous; a pellucid streak in disc; two or three white scales in middle of third segment; cilia pale prismatic purplish-fuscous, darker towards tips of segments, apex of third segment with a small projection of black scales above and beneath.

KEI ISLANDS, in May; one specimen.

TETRASCHALIS, Meyr.

Tetraschalis ischnites, n. sp.

3 Q. 14-15 mm. Head, palpi, and thorax white, sprinkled with brownish and dark fuscous. Antennæ whitish. Abdomen white, streaked with brown and sprinkled with blackish. Legs white, lined and barred with dark fuscous. Fore-wings cleft from $\frac{2}{3}$, seg-

Descriptions of Pterophoridæ and Orneodidæ. 475

ments very slender, tornus almost obsolete ; brown irrorated with white, strewn throughout with small white spots or bars, basal $\frac{2}{5}$ more or less wholly suffused with white ; costa more or less irrorated with black, more broadly posteriorly ; a blackish dot in disc at $\frac{1}{4}$; a small black spot on base of lower margin of first segment, and a black dot below base of cleft ; white patches on costa at middle and $\frac{4}{5}$ of first segment, separated by a blackish patch, and a corresponding blackish patch on second segment : cilia white, irregularly barred with pale ochreous, with scattered black scales, at tornus with a grey bar mixed with stronger black scales. Hind-wings cleft firstly from $\frac{1}{3}$, secondly from near base, segments linear ; grey-whitish irrorated with dark fuscous ; cilia grey with irregular whitish patches, apex of each segment with a small black scale-projection, third segment with a large triangular black dorsal scale-projection at $\frac{2}{3}$.

ASSAM (Khasi Hills), in October and November; two specimens.

Tetraschalis ochrias, n. sp.

3. 21-22 mm. Head and thorax pale ochreous sprinkled with whitish, crown sprinkled with grey, face irrorated with blackish. Palpi whitish, second joint with a streak of blackish irroration, terminal joint banded with blackish irroration. Antennæ ochreouswhitish with a dark fuscous line. Abdomen whitish streaked with dark fuscous irroration. Legs whitish lined with blackish, posterior pair banded with fuscous. Fore-wings cleft from before middle, segments very slender, apex of second long-produced, subfalcate, very acute; ochreous-whitish, irregularly tinged and sprinkled or suffused with brownish : some dark fuscous irroration towards dorsum anteriorly; a dark fuscous dot beneath costa near base, and another at 1; an oblique blackish mark at base of cleft; blackish marks on costal edge before and beyond middle of first segment ; a dark fuscous dash on first segment at about 3, followed by a white bar; posterior half of second segment mostly suffused with blackish : cilia ochreouswhitish, on lower margin of first segment with some scattered black scales, a grey posterior patch, and a black subapical scale-tooth, on upper margin of second segment mostly suffused with grey, with scattered black scales, on dorsum with grey patches towards middle of wing and before tornus, between these mixed with black scales, with a black scale-projection at tornus and a small one at apex. Hind-wings cleft firstly from 4, secondly from near base, segments linear; dark grey, first and second segments sometimes partially suffused with whitish; cilia grey, on costa with a whitish patch towards middle, on upper margin of third segment with a few black scales, on dorsum irregularly mixed with black scales from base to apex, with broad irregular black scale-projections at $\frac{1}{3}$ and beyond $\frac{2}{3}$.

ASSAM (Khasi Hills), in November; KEI ISLANDS, in March; two specimens.

Tetraschalis lemurodes, n. sp.

& Q. 23-24 mm. Head, palpi, and thorax dark reddish-fuscous sprinkled with blackish and whitish. Antennæ grey, above dotted with black and white scales. Abdomen very long and slender, dark reddish-fuscous sprinkled with whitish. Legs dark reddishfuscous lined with white. Fore-wings very narrow, cleft from 1, segments almost linear, second segment with tornus slight but distinct, its apex extremely slender and elongate; dark reddishfuscous sprinkled with whitish; first segment with a broad band of whitish suffusion beyond its middle, and a narrow fascia towards apex, sometimes also much suffused with whitish anteriorly : cilia dark fuscous, on costa whitish with several dark fuscous patches, on lower margin of first segment with some scattered white and black scales, on both margins of second segment irregularly mixed with black scales. Hind-wings cleft firstly from $\frac{L}{b}$, secondly from near base, segments linear; dark fuscous; cilia dark fuscous, on upper margin of third segment with scattered black scales, on dorsum much mixed with black and white scales from base to apex, forming a rather longer and more conspicuous accumulation beyond middle.

KEI ISLANDS, in April and May; two specimens.

OXYPTILUS, Z.

Oxyptilus epidectes, n. sp.

3 Q. 11-13 mm. Head and thorax dark fuscous sprinkled with whitish, metathorax suffused with white. Palpi whitish, banded with dark fuscous irroration. Antennæ white, lined with dark fuscous. Abdomen reddish-fuscous, sprinkled with whitish and mixed on sides with dark fuscous, third segment with a cloudy white arrowhead on back. Legs white, tibiæ and sometimes posterior tarsi banded with dark fuscous. Fore-wings cleft from about middle, segments very narrow, apex of second long-produced, very slender; dark reddish-fuscous, sprinkled with whitish; an oblique white mark in disc about $\frac{1}{3}$, sometimes indistinct; a white mark on base of cleft, edged internally with dark fuscous, extended as a white spot on lower

Descriptions of Pterophoridæ and Orneodidæ. 477

margin of first segment; a white band or costal spot on first segment about middle, preceded and followed on costa by some blackish scales; sometimes a whitish bar at $\frac{3}{4}$ of first segment: cilia within eleft grey mixed with black and a few white scales, at base of cleft ochreous-whitish, beneath apex barred with white, on termen of second segment whitish except towards angles, on dorsum ochreouswhitish with a grey posterior patch, with a strong blackish scaleprojection opposite base of cleft, and three rather smaller ones posteriorly, last tornal. Hind-wings cleft firstly from $\frac{1}{3}$, secondly from near base, segments linear; dark fuscous; cilia fuscous, third segment with a small black dorsal scale-tooth beyond middle.

BURMA (Mone) (Manders); COORG, 3,000 feet (Newcome); NILGIRIS, 3,500 feet (Andrewes); CEYLON (Maskeliya) (Alston); in August, October, January and May; four specimens. I have also a specimen taken by myself at Port Louis, Mauritius, in May. The strong black median scale-tooth of fore-wings is characteristic.

Oxyptilus pelceyntes, n. sp.

& 9. 11-15mm. Head dark fuscous. Palpi white banded with blackish. Antennæ white lined with black. Thorax dark fuscous, with an ochreous-white posterior spot. Abdomen ochreous-brown streaked with blackish, margins of segments mixed with white, with an ochreous-white basal patch. Legs white, anterior and middle pairs lined with black, posterior pair banded with black. Forewings cleft from middle, segments narrow, apex of second longproduced, slender, termen concave ; dark reddish-fuscous, sprinkled with whitish-ochreous; first segment with a small white spot on base of lower margin, and two slender undefined somewhat inwardly oblique white bars at $\frac{1}{3}$ and $\frac{2}{3}$; second segment sometimes with a few white scales at $\frac{1}{3}$ and $\frac{2}{3}$: cilia on costa ochreous-whitish with black scales at base and blackish patches before and between bars, in cleft grey with scattered black scales, on dorsum ochreous-white with a black scale-tooth before cleft, others at $\frac{1}{4}$ of second segment and apex, and a grey patch mixed with black midway between these. Hind-wings cleft firstly from about 1, secondly from near base, segments linear ; dark fuscous; cilia dark grey, on dorsum with two or three scattered black scales, and a moderate black scale-projection at # of third segment, marked with some black scales on upper side also.

Assam (Khasi Hills) in April and September; three specimeus.

Mr. E. Meyrick's Notes and

Oxyptilus raptor, n. sp.

2. 19 mm. Palpi whitish, spotted with dark fuscous. Abdomen brown mixed with dark fuscous, segmental margins mixed with white. Legs white, lined and banded with dark fuscous. Forewings cleft from beyond middle, segments narrow, first pointed, second somewhat dilated, its apex long, acute, termen concave; ferruginous-fuscous, irrorated with dark fuscous; a small dark fuscous spot on base of cleft; first segment crossed by two inwardly oblique whitish bars at $\frac{1}{3}$ and $\frac{2}{3}$, former rather broad, latter slender; a similar bar crossing second segment at $\frac{2}{3}$: cilia dark fuscous, on costa more blackish, and barred with whitish on costal markings, beneath apex with two whitish bars, on termen of second segment whitish except towards angles, on dorsum mostly whitish with dark fuscous bars before and beyond cleft, and a dark fuscous patch towards tornus. Hind-wings cleft firstly from 2, secondly from 1, segments very slender; dark fuscous, third segment brownishochreous from base to near 2 and at apex; cilia fuscous, on both margins of third segment with a patch of blackish scales extending from before $\frac{2}{3}$ of segment to $\frac{5}{6}$.

COLORADO, U.S.; one specimen.

Oxyptilus caminites, n. sp.

3. 21 mm. Head and thorax dark fuscous, lower margin of face with a white bar. Palpi dark fuscous, lower edge white. Antennæ dark grey, with two series of white dots. Abdomen blackish, three basal segments orange-fulvous above except on lateral and posterior margins, apical scales pale ochreous, beneath with an elongate pale fulvous ventral patch extending over first two segments, and two spots on third. Legs dark fuscous, anterior and middle pair lined with white, posterior pair with indications of whitish bands. Forewings cleft from ²/₃, segments moderately broad, termen nearly straight, oblique; dark bronzy-fuscous, costal third sprinkled with whitish from base to beyond cleft; a very fine white line crossing first segment and upper half of second not far from termen : cilia whitish, on termen grey with white base and black spots at angles of segments, within cleft and on dorsum with dark grey patches on posterior half of segments, on dorsum with three black scaleprojections. Hind-wings cleft firstly from 1, secondly from 1, segments linear; blackish; cilia grey, on first segment and upper margin of second whitish-ochreous except towards tips, third segment with a rather small triangular black dorsal scale-tooth at about # of wing.

Descriptions of Pterophoridæ and Orncodidæ. 479

ASSAM (Khasi Hills) in September; one specimen. The unusual coloration of the abdomen, combined with the general superficial appearance, is so suggestive of some of the fossorial *Hymenoptera*, that I think it may be protective.

Oxyptilus peltastes, n. sp.

3. 12-13 mm. Head and thorax ferruginous-brown mixed with dark fuscous, sometimes pale-sprinkled, metathorax pale yellow. Palpi sickle-shaped, acute, ferruginous, terminal joint and apex of second somewhat whitish-sprinkled, anterior edge blackish. Antennæ blackish, whitish-sprinkled. Abdomen deep chestnut-bronze-brown, basal segment and apical margin of second and third whitish, fourth segment with two pale or whitish dorsal patches. Legs goldenbronze, spurs and tarsi suffused with dark fuscous, posterior tibiæ with whorls of dark fuscous spines near base and on origin of spurs. Fore-wings cleft from 3, first segment rather narrow, second posteriorly dilated, its apex produced, termen concave, oblique; deep chestnut-brown, thinly sprinkled throughout with white; costal edge dark fuscous; whitish-ochreous dots or small spots on first segment at base and on costa before its middle and towards apex ; cilia ochreous-whitish, with blackish patches at angles of both segments, black bars on dorsum at middle and 3, and some grey suffusion towards base of cleft. Hind-wings cleft firstly from ²/₆, secondly from near base, segments linear; dark fuscous, towards base and on third segment suffused with ferruginous; cilia light yellowish, suffused with grey towards apex of first two segments, third segment with a small black apical scale-tuft.

QUEENSLAND (Cairns), in October (Dodd); four specimens.

XYROPTILA, n. g.

Head with appressed scales, on back of crown with erect scales. Palpi moderately long, slender, curved, sickle-shaped, smooth, terminal joint somewhat longer than second, acute. Antennæ in \mathcal{J} simple. Posterior legs with small whorls of scales at origin of spurs and apex of tarsal joints. Fore-wings cleft from about $\frac{2}{3}$, segments moderate, rather dilated posteriorly; 2 from middle of cell, 3 and 4 from angle, 5 and 6 very short, 7 from near 8, long, 9 apparently absent, 8 and 10 stalked, 11 from near 8. Hind-wings cleft firstly from $\frac{1}{3}$, secondly from near base, segments linear, without black scales in cilia; 2 and 3 absent, 5 and 6 very short, 7 to apex. TRANS. ENT. SOC. LOND. 1907.—PART IV. (FEB. '08) 32 Allied to *Oxyptilus*, especially to *O. peltastes*, but distinguished by the entire absence of the black scales in cilia of hind-wings. Type *X. anophanes*.

Xyroptila marmarias, n. sp.

3 9. 11-12 mm. Head golden-bronze, mixed with dark fuscous. Palpi golden-ochreous, anterior edge blackish. Antennæ dark grev. Thorax coppery-bronze, mixed with white posteriorly, anterior half bright golden. Abdomen bright golden-bronze, base of first segment yellowish-white, margins of second and third segments more or less whitish, towards middle and apex more or less suffused with dark coppery-fuscous. Legs golden-bronze, spurs and tarsi suffused with dark fuscous, posterior tibiæ with whorls of spines near base and at origin of spurs. Fore-wings cleft from 3, first segment rather narrow, second posteriorly dilated, its apex produced, termen concave, oblique ; very deep ferruginous, costal edge dark fuscous; markings deep yellow, more developed and larger in \mathcal{Q} ; some irregular small spots or strigulæ anteriorly, and a larger spot before middle; first segment with a transverse mark at base, a costal spot in middle, and a transverse mark near apex; second segment with a spot towards base and a transverse mark near termen : cilia yellowish tinged with rosy, with blackish patches at angles of both segments, and two blackish bars on dorsum. Hind-wings cleft firstly from 2, secondly from near base, segments linear; dark fuscous; anterior part of disc and most of third segment in & deep ferruginous, in 9 bright golden; cilia pale shining rosy, tinged with purplish-grey on costa and towards apex of first two segments.

QUEENSLAND (Cairns), in October (*Dodd*); two specimens.

Xyroptila œnophanes, n. sp.

 3° Q. 10-11 mm. Head and thorax fuscous irrorated with dark fuscous. Palpi whitish lined with black. Antennæ white with blackish dorsal line. Abdomen rather dark fuscous, base ochreouswhite, beneath whitish. Legs dark fuscous, anterior and middle pairs streaked with whitish, posterior pair with indications of whitish bands. Fore-wings with apex of second segment produced, acute, termen concave ; dark ferruginous-fuscous, somewhat sprinkled with whitish ; a whitish bar parallel to termen crossing both segments before their middle : cilia pale ochreous tinged with crimson, with a black bar at apex, and blackish-grey posterior patches on lower margin of first segment and both margins of second. Hind-wings dark fuscous; cilia pale ochreous tinged with crimson.

BOMBAY (Bandora), in September; four specimens.

KOREMAGUIA, Hamps.

This is a good genus, with distinct neuration.

Koremaguia alticola, Feld.

(Cnemidophorus alticola, Feld., Reis. Nov. pl. CXL, 59; Koremaguia aurantidaetyla, Hamps., Ill. Het. Brit. Mus. VIII, 142, pl. 156, 20.)

I think Felder's figure undoubtedly represents this species, which varies in extent of dark suffusion; I have it from the Andaman Islands, and it is recorded from the Nilgiris and Himalaya.

PLATYPTILIA, Hb.

Platyptilia ignifera, n. sp.

3. 20 mm. Head, thorax, and abdomen dark fuscous, partly tinged with blackish and ferruginous. Palpi and antennæ ferruginous, sprinkled with whitish and dark fuscous. Legs dark fuscous partly mixed with ferruginous, posterior coxæ with a small silverywhite spot, apex of all tibiæ, centre of middle and posterior tibiæ, and apex of three joints of posterior tarsi with large dense expanded whorls of scales, spurs thickened with rough scales. Fore-wings cleft from about 3, segments broad, termen sinuate, little oblique; purplish-fuscous irrorated with dark fuscous, and somewhat mixed with brownish or ferruginous-brown; indications of an undefined bent blackish-fuscous bar near termen : cilia light grey, basal 2 ferruginous-fuscous edged with a black line, sinuate-concave in middle of termen of each segment. Hind-wings cleft firstly from middle, secondly from 1, third segment very short; deep orange; first segment posteriorly suffused with dark fuscous; third segment somewhat mixed with dark fuscous; cilia fuscous tinged with crimson, on dorsum of third segment with several scattered short dilated black scales, and a large projection of dark purplish-fuscous scales tipped with black occupying apical fourth. Fore-wings beneath with disc deep orange.

Assam (Khasi Hills), in August; one specimen. Allied

Mr. E. Meyrick's Notes and

to the African species described by Lord Walsingham as Crocydoscelus ferrugineum, but I do not consider the genus Crocydoscelus sufficiently distinct from Platyptilia.

Platyptilia donatella, Walk.

This South American species is the type of the genus Sochchora, Walk., but it appears to differ in no important particular from *Platyptilia*, of which I therefore regard Sochchora as a synonym.

Platyptilia taprobancs, Feld.

(Amblyptilia taprobancs, Feld., Reis. Nov. pl. CXL, 54; Platyptilia Sythoffi, Snell. Tijd. v. Ent. XLVI, 54, pl. V, 15, 16.)

Felder's figure is very poor, but notwithstanding can only be this species. CEYLON (Madulsima, Pattipola, Maskeliya, Peradeniya) (Green, Pole, Alston); S. INDIA (Palni Hills) (Campbell); ASSAM (Khasi Hills); from April to January, a hill species, received in plenty. Described by Snellen from Java.

Platyptilia citropleura, n. sp.

3 9. 15-18 mm. Head blackish, sides, a frontal row of dots, and lower part of face pale yellow. Palpi black, beneath spotted with pale yellowish. Antennæ blackish. Thorax dark ferruginoususcous, central third blue-black on anterior half, beneath and on sides of metathorax pale clear yellow. Abdomen dark ferruginousfuscous, on dorsum blue-blackish, beneath with a series of pale yellow spots. Legs blackish dotted with white, posterior tarsi with three apical joints mostly white. Fore-wings cleft from $\frac{3}{4}$, segments broad, termen oblique, on second segment bowed ; dark ferruginousfuscous becoming blackish posteriorly; a series of minute white costal and subcostal dots, last four larger and costal; sometimes a few scattered white scales in disc; a very fine white line near termen on first segment and upper half of second : cilia on termen blackish spotted with white, whitish on inner half of cleft and blackish-grey on outer half, on dorsum whitish with black scale-teeth before and beyond ²/₃, and a small grey posterior patch. Hind-wings cleft firstly from $\frac{1}{2}$, secondly from $\frac{1}{5}$, apex of second segment slenderly produced, third segment short; blackish; cilia grey, third segment with a very small triangular black dorsal scale-tooth almost at apex.

Descriptions of Pterophoridæ and Orneodidæ. 483

ASSAM (Khasi Hills); CEVLON (Maskeliya) (Alston); in March, and from June to October; twelve specimens. Very similar to taprobanes, but smaller and blacker, forewings cleft from $\frac{3}{4}$ only (instead of from $\frac{2}{3}$), without dark costal blotches, cilia at base of cleft clear white, narrower white bars in terminal cilia, and scale-tooth of hind-wings all but apical, whereas in taprobanes it is a little before apex.

Platyptilia brachymorpha, Meyr.

Amblyptilia Seeboldi, Hofm. (Iris, xi, 33), from Syria, is a synonym of this species; the description is very accurate and unmistakable. The species ranges from S. Africa through India to the Hawaiian Islands.

Platyptilia pusillidaetyla, Walk.

Platyptilia hemimetra, Meyr., Trans. Ent. Soc. Lond. 1886, 18, is a synonym of this species. I could not determine this identification from Walker's type, but have lately received specimens from his locality (Jamaica), which are conclusive. This is another wide-ranging insect, known from Réunion, Ceylon, India, and the West Indies.

Platyptilia charitopa, n. sp.

3. 12-14 mm. Head and thorax orange-ochreous sprinkled with fuscous, frontal tuft very short. Palpi orange-ochreous sprinkled with blackish, above and beneath mixed with whitish. Antennæ grey, above blackish with two series of white dots. Abdomen orangeochreous variably mixed or sprinkled with blackish, on back sometimes mixed with white or pale yellow. Legs orange-ochreous sprinkled with dark fuscous, anterior and middle pairs lined with black beneath, posterior pair banded with whitish and blackish. Fore-wings cleft from ²/₃, segments moderate, posteriorly dilated, termen of first indented-concave, of second rounded-prominent in middle, sinuate-concave above and below this, rather strongly oblique; orange-ochreous, posterior $\frac{2}{3}$ and dorsum anteriorly more or less sprinkled irregularly with dark fuscous; costa narrowly black dotted with white; a cloudy spot of blackish suffusion towards dorsum at $\frac{1}{4}$, and one in disc at $\frac{1}{3}$; a large triangular blackish blotch on costa before cleft, its apex reaching beyond cleft; a broad fascia of blackish suffusion covering nearly anterior $\frac{2}{5}$ of both segments, edged posteriorly by a fine white line and anteriorly by a less distinct one; a black terminal line : cilia whitish-ochreous, on costa suffused with dark fuscous, on termen with basal half dark fuscous on angles and prominence, beneath lower angle of first segment with a blackish patch, on dorsum with some scattered black scales anteriorly, a blackish scale-tooth beyond middle, and two blackish bars posteriorly. Hind-wings cleft firstly from before middle, secondly from $\frac{1}{5}$, third segment short; dark fuscous, more or less orange-tinged towards base, third segment orange-ochreous mixed with dark fuscous; cilia ochreous, at apex of first two segments dark grey, third segment with some scattered black scales on both margins, and a large black triangular scale-projection beneath occupying apical fourth.

BOLIVIA (Songo); three specimens. Belongs to the group of *brevipennis*, in which it is characterised by its bright colouring.

Platyptilia paraglyptis, n. sp.

8 14 mm. Head brownish, frontal tuft very short. Palpi fuscous, apex of joints whitish-ochreous. Antennæ fuscous dotted with whitish. Thorax pale ochreous mixed with brownish. Abdomen whitish-ochreous, mixed with brownish on sides. Legs whitishochreous, anterior and middle femora and tibiæ lined with dark brown. Fore-wings cleft from $\frac{2}{3}$, segments moderately broad, termen of first sinuate beneath apex, of second very obliquely bowed; brownish-ochreous, indistinctly transversely striated with brown irroration; costal edge suffused with dark fuscous from near base to blotch; a spot of dark fuscous suffusion on dorsum at $\frac{1}{4}$, and one beneath costa at $\frac{2}{5}$; a triangular dark fuscous blotch on costa before cleft, its apex reaching to below cleft ; costal edge beyond this dark fuscous, interrupted by four dots of whitish suffusion, third giving rise to a whitish line crossing first segment and obscurely indicated on second; segments sprinkled with dark fuscous and whitish, darkest posteriorly; cilia whitish, on termen with a dark fuscous subbasal line becoming blackish towards tornus, indented once on first and twice on second segment, within cleft fuscous-tinged, with some scattered dark fuscous scales, on dorsum with about five small teeth of dark fuscous scales. Hind-wings cleft firstly from before middle, secondly from $\frac{1}{5}$, segments moderate, first dilated, termen of second very obliquely sinuate; dark fuscous; cilia grey, round termen of first segment with dark grey subbasal shade, on dorsum

with moderate triangular black scale-projection beginning at $\frac{3}{4}$, and scattered blackish scales between this and base.

ARGENTINA (Parana); one specimen.

Platyptilia direptalis, Walk.

(Oxyptilus direptalis, Walk., B. M. Cat. 934.)

& Q. 19-21 mm. Head, palpi, and thorax brown sprinkled with whitish, face with short cone of scales. Antennæ white spotted with dark fuscous. Abdomen brownish, streaked with whitish and sprinkled with dark fuscous. Legs whitish banded with brownish, apex of joints dark fuscous. Fore-wings cleft from before 3, segments moderately broad, apex of first produced, subfalcate, termen of second bisinuate, oblique; light yellow-ochreous, irregularly mixed with ferruginous-brown and in disc with white; some dark fuscous scales towards dorsum about 1; costal edge more or less dark fuscous; a triangular dark fuscous blotch, posteriorly edged with white, resting on costa just before cleft and reaching $\frac{2}{3}$ across wing; a slender white bar crossing both segments near termen but not reaching dorsum, preceded on second segment and lower edge of first by a patch of blackish irroration or suffusion : cilia whitish, on termen with basal half brownish edged with blackish-grey and barred with whitish, in cleft grey except on a posterior patch enclosing a dark grey bar, on dorsum with an elongate-triangular projection of black scales about ²/₃, two or three scattered black scales before this and a bar beyond it. Hind-wings cleft firstly from before middle, secondly from 1; dark grey; cilia grey, third segment on dorsum with some scattered black scales anteriorly, an elongate-triangular projection of black scales extending from middle to $\frac{3}{4}$, and some black scales beneath apex.

CEYLON, Pattipola, 6,000 feet, (Alston); S. INDIA, Palni Hills, 6,000 feet, (Campbell); Nilgiri Hills, 6,000 feet (Andrewes); Simla, 8,000 feet (Indian Museum); also known from Cape Colony and the Congo. This is identified by Lord Walsingham with the European cosmodactyla, but is in my judgment quite distinct, though nearly allied; it differs markedly in the colouring, and also especially by the narrower segments of hind-wings, of which the second has the apex obviously more produced, and the different form of the principal dorsal scale-projection on each wing; in cosmodactyla the one on the fore-wings is narrower, with its posterior edge much more abrupt and obviously concave, and the one on the hind-wings is rather longer and rather narrower, so as to appear distinctly more abrupt. I do not observe any difference between Walker's type and my Indian specimens, but it is noticeable that all the latter are from high altitudes.

Platyptilia epidelta, n. sp.

Head ferruginous-ochreous, partially infus-♂ ♀. 17-21 mm. cated, with moderate frontal cone of scales. Palpi moderate, whitishochreous, basal and second joints irrorated with dark fuscous except apex of second. Antennæ light brownish, towards base mixed with black above. Thorax rather dark brown or fuscous, with transverse pale brownish-ochreous band behind middle, metathorax with lateral ochreous-white stripes edged above with black. Abdomen brown irregularly mixed with ochreous-whitish, third segment with a suffused oblique dark fuscous lateral mark. Legs whitish, suffusedly banded with ferruginous-ochreous, apex of joints suffused with dark fuscous. Fore-wings cleft from $\frac{3}{4}$, segments broad, termen of first sinuate, of second prominent on vein 3, very obliquely sinuate below it; ferruginous-ochreous mixed with dark fuscous, transversely striated with whitish; indistinct spots of dark fuscous suffusion in disc at $\frac{1}{3}$, and on dorsum obliquely before this, latter followed by a whitish spot; a triangular dark fuscous blotch on costa before cleft. its apex reaching to below cleft; a blackish triangular costal blotch about middle of first segment, more or less edged with white suffusion, its apex connected with posterior extremity of a blackish dash beneath it; a very small dark fuscous costal spot before apex; some dark fuscous suffusion before middle of second segment, sometimes followed by an oblique white transverse line ; termen marked with dark fuscous : cilia ochreous-whitish partially tinged with fuscous, on termen with an ochreous-fuscous antemedian shade more or less marked with blackish, extending round tornus, on dorsum with scattered dark fuscous scales, and two strong dark ochreousfuscous teeth. Hind-wings cleft firstly from $\frac{1}{2}$, secondly from $\frac{1}{2}$, first two segments dilated, termen of second sinuate ; dark fuscous ; cilia whitish-fuscous, on termen with a darker fuscous antemedian shade, on dorsum with scattered blackish scales, and a strong elongatetriangular blackish scale-projection commencing at $\frac{2}{3}$, and a smaller one at apex.

ARGENTINA (Parana); nine specimens. Varies to some extent, but recognisable by the conspicuous sharply-defined second costal triangle, which is darker than first.

Platyptilia cretalis, n. sp.

J. 21-22 mm. Head, palpi, antennæ, thorax, and legs whitish (abdomen broken); face without tuft; antennæ with blackish line above towards base; palpi with dark fuscous lateral streak; anterior and middle femora and tibiæ and basal joint of tarsi lined with dark fuscous, posterior tibiæ infuscated beneath towards middle and apex. Fore-wings cleft from 2, segments moderately broad, termen concave so that apex of each segment appears falcate; ochreous-whitish, on segments slightly tinged or sprinkled with pale brownish; some fuscous scales forming a cloudy dot in disc at $\frac{1}{2}$, and two transversely placed close before cleft; minute dark fuscous dots on costa at 1/3 and $\frac{2}{3}$ of first segment; termen and posterior half of lower margin of both segments narrowly suffused with fuscous, and edged with a dark fuscous line: cilia ochreous-whitish, with dark fuscous spots at both angles of both segments, some fuscous suffusion a little before lower angle of both segments, and small blackish scale-teeth on dorsum beyond middle and at $\frac{3}{4}$. Hind-wings cleft firstly from middle, secondly from $\frac{1}{4}$, segments moderate, apex of second longfalcate; grey; cilia whitish-fuscous, with traces of darker scales beyond middle.

JAPAN; two specimens. These are not in good order, and possibly the dark dorsal scales may be naturally better expressed, but the species is a very distinct one.

Platyptilia empedota, n. sp.

of Q. 20-21 mm. Head brownish, face with moderate roughly projecting scales. Palpi dark fuscous, white above and beneath. Antennæ whitish with a blackish line above. Thorax ochreouswhitish, suffused anteriorly and posteriorly with light red-brownish. Abdomen whitish-ochreous longitudinally lined with dark brown, base whitish, anal values in \mathcal{J} elongate, white, with a brownish line on sides. Legs white, banded with brownish, and longitudinally lined with blackish. Fore-wings cleft from beyond 2, segments moderately broad, termen of first slightly sinuate, rather oblique; red-brown sprinkled with silvery-whitish, suffused with whitishochreous on costal half anteriorly, and on a streak extending from this along middle of second segment to near termen; a dark reddishfuscous dot in disc beyond $\frac{1}{3}$, and two transversely placed before cleft : costal cilia dark fuscous throughout ; remaining cilia grey, on termen white with strong black basal line, on dorsum with some small scattered black scales. Hind-wings cleft firstly from middle, secondly from $\frac{1}{2}$, segments moderate; reddish-fuscous; cilia grey, on dorsum with a few scattered brownish and blackish scales from base to $\frac{3}{4}$.

TRANSVAAL (N.E. Pretoria district), in January (Janse); five specimens.

Platyptilia xylopsamma, n. sp.

9.28 mm. Head light yellow-ochreous sprinkled with whitish, frontal tuft moderate. Palpi $2\frac{1}{3}$, pale yellow-ochreous sprinkled with fuscous, white beneath and at apex. Antennæ whitishochreous, above with a dark fuscous line. Thorax brownishochreous sprinkled with whitish, especially on patagia, which are somewhat expanded towards apex. Abdomen whitish-ochreous, faintly streaked with brownish. Legs whitish, lined with dark fuscous (posterior pair broken). Fore-wings cleft from ³/₄, segments broad, termen of first somewhat sinnate, of second very slightly bent, oblique; brownish-ochreous, slightly sprinkled with whitish, dorsal half suffused with pale whitish-ochreous from base to cleft; costal edge very shortly strigulated with dark fuscous on basal third; a small round dark fuscous spot in disc at $\frac{1}{3}$, and another tending to form a transverse mark close before and beneath cleft; a mark of dark fuscous suffusion along costa above eleft, followed by a white mark mostly in costal cilia : cilia pale greyish-ochreous, on termen with basal half rather dark fuscous, on dorsum with a greyish bar beneath cleft. Hind-wings cleft firstly from before middle, secondly from $\frac{1}{6}$, first segment considerably dilated, second moderate; ferruginous-fuscous; cilia pale greyish, within cleft mostly suffused with very pale ochreous, on termen of first segment darker grey on basal half, on dorsum with a series of short dark fuscous scales from base to 2.

COLORADO, U.S., 7,000 feet; one specimen.

Alucita, L.

In the fore-wings the principal vein remaining in the first segment should be regarded as vein 7, not 8.

Alucita laeteipennis, Walk.

(Aciptilus lacteipennis, Walk., Brit. Mus. Cat. 949.)

♂ ♀. 24-28 mm. Head, antennæ, and thorax white, collar sometimes sprinkled with grey. Palpi white, sometimes slightly

Descriptions of Pterophorida and Orneodida. 489

sprinkled with dark grey towards apex. Abdomen white, with a few black lateral scales posteriorly. Legs white, anterior femora and tibiæ streaked with blackish, middle tibiæ with fine oblique median bar and apical dot blackish, posterior tibiæ with internal fringe of projecting scales on basal half, with a few black specks, and black dots on origin of spurs, posterior tarsi somewhat roughened with scales, third and fourth joints tufted above and with apical black dots (in Australian form nearly obsolete). Fore-wings cleft from before $\frac{1}{3}$, segments linear; white, with some scattered black specks; black dots on costa before and beyond middle and about $\frac{3}{4}$ and on lower margin of first segment towards apex ; a minute black dot before middle of second segment, and a round black dot at 3: cilia white, with three grey bars (faint in Australian form) on lower margin of each segment, and on upper margin of second segment at $\frac{1}{2}$ of length. Hind-wings cleft firstly from $\frac{1}{5}$, secondly almost from base, segments linear ; white, with some black specks, especially at base of first cleft, and along costa from $\frac{1}{4}$ to middle; second segment with small black dots at $\frac{1}{2}$, $\frac{2}{3}$, and before apex; cilia white, on costa with a grey space before middle and bar at $\frac{3}{4}$, on lower margin of second segment with grey bars on first two dots.

BURMA; BORNEO; NEW GUINEA, Woodlark Island; SOLOMON ISLANDS; QUEENSLAND, Cairns (*Dodd*); Walker's type, recorded as from Hindostan, is really from Burma. The closely allied *mclanopoda*, Fletcher, which ranges from Ceylon to Assam, has the tufts of posterior tarsi mainly black; in Walker's type the tips of the tarsi are broken, but enough remains, in conjunction with other characters, to show the identity of the species, which I have thought it best to redescribe here.

Alucita rhyparias, n. sp.

♂. 19-20 mm. Head and thorax ochreous-whitish, face fuscous. Palpi short, whitish, terminal joint very short. Antennæ whitish, above with a grey line near base. Abdomen ochreous-whitish, with fuscous dorsal line, and some black lateral dots. Legs whitish, anterior and middle femora and tibiæ dark grey anteriorly. Forewings cleft from $\frac{2}{6}$, segments very slender; ochreous-grey-whitish, base of cleft and lower margin of both segments grey; cilia ochreousgrey-whitish, with a faint grey median shade, with two minute black dots on costa at about $\frac{1}{2}$ and $\frac{3}{4}$ of first segment, and three on dorsum of second segment near its base and about $\frac{1}{2}$ and $\frac{2}{3}$. Hindwings cleft firstly from $\frac{1}{8}$, secondly from $\frac{1}{8}$, segments linear; pale grey; cilia pale grey, becoming grey-whitish towards base. TRANSVAAL, Pretoria, from February to April (Janse); three specimens.

Alucita elacopa, n. sp.

3 Q. 21-26 mm. Head ochreous-whitish, sprinkled with dark fuscous. Palpi and antennæ whitish. Thorax and abdomen whitishochreous. Legs whitish, anterior and middle tibiæ blackish beneath, posterior legs whitish-ochreous. Fore-wings cleft from $\frac{2}{5}$, segments linear; pale ochreous; minute black dots on costa at about $\frac{2}{5}$ and $\frac{3}{5}$ of first segment: cilia whitish-ochreous, within cleft with scattered blacktipped scales, on dorsum with four small equidistant projections of black-tipped scales, first before cleft, fourth at $\frac{3}{4}$ of second segment. Hind-wings cleft firstly from $\frac{1}{3}$, secondly from near base, segments linear; ochreous-whitish tinged with grey, base of cleft grey; cilia ochreous-grey-whitish, at base with minute scattered grey scales especially on first segment.

ASSAM (Khasi Hills), in November; three specimens.

Alucita candidalis, Walk.

(Aciptilus candidalis, Walk., Brit. Mus. Cat. 948; A. leucadactylus, ib. 948.)

After examining a considerable number of specimens, I am satisfied that these represent only one species, ranging from South Africa through India to the Philippines, New Guinea, and North-East Queensland, varying in the development of the minute black dots which are more or less apparent at the base of the cilia, but always recognisable by its pale yellowish colour (though described as white by Walker in each instance) from the following species, to which it is otherwise closely allied. *A. aptalis*, Walk., is much broader-winged.

Alucita nivcodactyla, Pag.

(Alucita nivcodactyla, Pag. "Zoologica" xxix, 240; A. nivca, Snell. Tijd. v. Ent. xlvi, 56, pl. V, 17.)

Differs from the preceding in being pure white; it ranges from Ceylon to the Philippines and Solomon Islands.

PSELNOPHORUS, Wallgr.

Gypsochares, Meyr., cannot be regarded as sufficiently distinct from this. The neural characters of fore-wings are in part incorrectly given by me; there are however differences between some of the species as stated below, but I think they should be treated as specific only. The neuration of *Pselnophorus* should then be defined thus: 7 present, 8 absent, 9 sometimes absent (in *catharotes, hemiargus*, and *baptodactylus*) or out of 7, 10 out of 7, 11 out of 7 or separate (in *vilis*).

Psclnophorus hemiargus, n. sp.

J. 14 mm. Head whitish-ochreous, between antennæ white, face fuscous. Palpi short, white. Antennæ whitish-ochreous. Thorax whitish-ochreous, anteriorly suffused with white. Abdomen whitish, longitudinally streaked with pale ochreous. Legs white, lined with dark fuscous. Fore-wings cleft from before middle, segments narrow, very acute; 9 absent, 10 and 11 out of 7; whitish-ochreous; a moderate streak of white suffusion along costa from base to middle; costal edge finely mixed with dark fuscous for a short space above cleft; first segment sprinkled with white posteriorly; second segment wholly suffused with white except at base : cilia whitish-ochreous, on costa white, on second segment white towards apex above. Hindwings cleft firstly from before $\frac{1}{3}$, secondly from $\frac{1}{4}$, segments slender; grey; cilia light greyish-ochreous, at apex of segments whitish.

SYRIA (Beirut); one specimen. Allied to *Hedemanni*, Reb., which has similar neuration.

Pselnophorus catharotes, n. sp.

3 Q. 12-15 mm. Head fuscous, with a white frontal line, face somewhat sprinkled with white. Palpi short, grey sprinkled with white. Antennæ white, above with a dark grey line. Thorax fuscous, anterior margin more or less suffused with white irroration. Abdomen brown, with several white lines. Legs white lined with blackish, last four joints of posterior tarsi wholly white. Fore-wings cleft from $\frac{1}{2}$, first segment moderate, second narrow, both acutely pointed; 9 absent, 10 and 11 out of 7; light brown, irrorated with dark fuscous; costa from base to $\frac{2}{3}$ irrorated with white; a small blackish spot above middle at $\frac{1}{3}$, and another beneath base of cleft; a blackish mark on costa beyond cleft, followed by a white patch mainly in costal cilia; second segment more or less irrorated or

Mr. E. Meyrick's Notes and

obscurely suffused with white: cilia dark fuscous-grey, on costa white towards apex, on second segment with a white spot above apex. Hind-wings cleft firstly from $\frac{1}{3}$, secondly from $\frac{1}{5}$, segments very narrow; dark fuscous; cilia fuscous-grey.

ASSAM (Khasi Hills), from August to November and in April; about eighty specimens. It is nearly allied to baptodactylus, which however differs from catharotes by absence of dark fuscous irroration, the presence of distinct black dots at apex of wing and extremity of vein 7, and clear white streak along upper half of second segment, dark-edged beneath; the extensive material obtained shows eatharotes to be constant in these particulars. Alucita albitarsella, Wals., must be referable to this genus and closely allied to these two species; I have not seen it, but from the description it must agree very nearly with *baptodactulus*, having the characteristic white streak of the second segment, but being apparently without the black dots. Probably Zeller's quotation of India as a locality for baptodactylus is founded upon albitarsella, the distinction of which must be at present regarded as doubtful, as Lord Walsingham makes no comparison with *baptodactylus*.

Pselnophorus vilis, Butl.

This name supersedes *amurcnsis*, Christ., having one year's priority. The species occurs in Eastern Siberia and Japan.

MARASMARCHA, Meyr.

Marasmarcha bonaespei, Wals.

(Lioptilus bonaespei, Wals., Trans. Ent. Soc. Lond. 1881, 281, pl. XIII, 46.)

This species, which I have from Weenen, Natal, is a true Marasmarcha.

Marasmarcha hodias, n. sp.

3. 13 mm. Head ochreous, anterior half of crown white. Palpi rather short, white. Antennæ white, rather shortly ciliated. Thorax ochreous-whitish. Abdomen whitish, with rather broad dark brown dorsal stripe. Legs white, anterior and middle femora and tibiæ and basal joint of tarsi lined with dark fuscous. Fore-wings cleft

Descriptions of Pterophorida and Orneodida. 493

from middle, segments narrow, acute; ochreous-whitish, somewhat sprinkled with light brown; some dark fuscous scales on base of eleft, continued as a dark fuscous line along basal fourth of lower margin of first segment; a dark fuscous dot on lower margin of first segment at $\frac{3}{4}$, and less definite dots at extremities of veins 2-4: cilia whitish, on dorsum and towards base of cleft tinged with brownish, on posterior dot of first segment with a brownish bar. Hind-wings cleft firstly from $\frac{1}{3}$, secondly from $\frac{1}{5}$, segments slender; grey; cilia pale grey.

BRAZIL, Sao Paulo; one specimen. Belongs to the *microdactyla* group.

Marasmarcha invida, n. sp.

3 Q. 12-13 mm. Head light brownish, between antennæ white. Palpi moderately long, white. Antennæ whitish, in 3 rather shortly ciliated. Thorax ochreous-whitish, dorsally tinged with brownish. Abdomen whitish, with brown dorsal line. Legs whitish, anterior and middle femora and tibiæ and basal joint of tarsi lined with dark fuscous. Fore-wings cleft from before $\frac{3}{5}$, segments rather narrow, acute; ochreous-whitish, somewhat sprinkled with brown; a curved oblique dark brown mark crossing base of cleft; a dark brown dash along costa a little beyond this; a dark brown dot on costa at $\frac{2}{3}$ of first segment, and others on extremities of veins 2, 3, and 7: cilia whitish-ochreous, on costa whitish, beneath apex with a patch of brown suffusion. Hind-wings cleft firstly from $\frac{1}{4}$, secondly from $\frac{1}{5}$, segments slender; grey; cilia pale greyish-ochreous.

BRAZIL, Sao Paulo; two specimens. The longer palpi and dark brown costal mark distinguish this species from the preceding.

PTEROPHORUS, Geoffr.

Pterophorus pavidus, n. sp.

Q. 18 mm. Head whitish-ochreous, crown anteriorly suffused with whitish. Palpi long $(2\frac{1}{4})$, white, terminal joint long, with whitish-ochreous median suffusion. Antennæ whitish, above with a dark fuscous line. Thorax whitish-ochreous. Abdomen whitishochreous, obscurely lined with dark fuscous. Legs whitish, anterior and middle femora and tibiæ lined with dark fuscous. Fore-wings cleft from before $\frac{2}{3}$, segments moderate, acute-pointed, termen of second sinuate, not falcate; whitish-ochreous, partially tinged with whitish; costa towards middle of first segment and termen of second segment somewhat infuscated: cilia ochreous-whitish, on apex of each segment with blackish dots, at extremities of veins 2 and 3 with small dark fuscous dots. Hind-wings cleft firstly from middle, secondly from $\frac{1}{4}$, first segment moderate, second narrow, its apex long-produced, termen sinuate; grey, somewhat whitish-suffused towards base and on third segment; apex of first segment with a dark grey dot; cilia whitish-grey, on dorsum with scattered whitish scales.

TRANSVAAL, Pietersburg, in December (Janse); one specimen.

Pterophorus timidus, n. sp.

♀. 19 mm. Head pale ochreous, between antennæ whitish. Palpi short (1), slender, whitish, terminal joint short, ochreous. Antennæ, thorax, abdomen, and legs whitish, anterior and middle femora and tibiæ lined with dark fuscous. Fore-wings cleft from §, segments moderate, acutely pointed, second rather falcate; whiti-h, partly faintly tinged with pale ochreous, sprinkled with grey towards anterior half of dorsum and before cleft; two dark grey dots above and below base of cleft; indistinct grey dots at extremities of veins 2, 3, and 7: cilia whitish. Hind-wings cleft firstly from middle, secondly from ¼, first segment moderate, second narrower, acutely pointed, rather falcate; ochreous-whitish partially suffused with light grey; cilia whitish, with grey dots at extremities of veins, more apparent on under-surface.

NATAL, Northdene (*Spiller*); one specimen. Easily separated from the preceding species by the very different palpi. Compared with *triadias*, the fore-wings are less deeply cleft, the segments shorter-pointed.

Pterophorus triadias, n. sp.

 3° Q. 20 mm. Head deep ochreous, with a white frontal band. Palpi whitish, upper edge blackish. Antennæ whitish. Thorax white. Abdomen ochreous-whitish. Legs whitish, anterior tibiæ and tarsi lined with black (others imperfect). Fore-wings cleft from beyond middle, segments moderate, gradually pointed; ochreouswhite, with more or less faint traces of pale ochreous longitudinal streaks : black dots on first segment at $\frac{2}{3}$ of its upper and $\frac{2}{3}$ of its

Descriptions of Pterophorida and Orneodida. 495

lower margin, and on second segment at $\frac{2}{3}$ of its lower margin; sometimes a blackish dot at apex of second segment: cilia whitishochreous, with a grey bar at apex of second segment. Hind-wings cleft firstly from beyond $\frac{1}{3}$, secondly from $\frac{1}{5}$, segments narrow; pale grey, apex of segments with more or less distinct blackish dots; third segment ochreous-whitish towards base, in $\frac{1}{5}$ with an ochreous-whitish hairpencil from base resting on it; cilia whitish-ochreous.

ASSAM (Khasi Hills), in September; three specimens.

Pterophorus harpactes, n. sp.

Head ochreous-brown, lower edge of face and anterior 3. 21 mm. half of crown white. Palpi fuscous, beneath white. Antennæ and thorax white. Abdomen whitish longitudinally streaked with brown. Legs white, anterior and middle femora and tibiæ lined with blackisb. Fore-wings cleft from middle, segments moderate, gradually pointed, apex of second narrowly produced, subfalcate; ochreous-whitish, largely suffused with pale brownish-ochreous; a black dot in disc at 1, another at base of cleft, and some scattered black scales between them; first segment with a blackish mark along costa at $\frac{1}{3}$, a black dot at ²/₃, and an irregular black line round apex and apical fourth of lower margin; second segment with a short blackish-fuscous dash ending in middle of termen, and an irregular blackish-fuscous marginal line round apical half: cilia ochreous-whitish, outer 2 brownish on lower margin of both segments except beneath apex of second, with a patch above apex of second segment dark grey except at base. Hind-wings cleft firstly from about $\frac{1}{3}$, secondly from $\frac{1}{6}$: grey, apex of segments blackish; cilia brownish, becoming ochreous-whitish towards base.

Assam (Khasi Hills), in September; one specimen.

Pterophorus palmatus, n. sp.

 3° Q. 19-20 mm. Head ochreous, between antennæ whitish. Palpi whitish, with an ochreous lateral line. Antennæ whitish, with a dark fuscous line above towards base, in 3° minutely ciliated. Thorax and abdomen yellow-whitish, faintly ochreous-tinged. Legs whitish, femora dark fuscous beneath, anterior and middle tibiæ and first joint of tarsi lined with dark fuscous, posterior tibiæ with a dark grey apical dot. Fore-wings cleft from $\frac{3}{2}$, segments moderate, acutely pointed, subfalcate; yellow-whitish, partially tinged or sprinkled with pale fuscous, before cleft and towards anterior half of dorsum suffused with fuscous; a minute dark fuscous dot in disc TRANS. ENT. SOC. LOND. 1907.—PART IV. (FEB. '08.) 33 at $\frac{1}{3}$; a short oblique transverse dark fuscous mark or dot at base of cleft; costal edge narrowly dark fuscous for a short distance above this; conspicuous blackish dots at extremities of veins 3 and 7: cilia ochreous-whitish. Hind-wings cleft firstly from $\frac{2}{5}$, secondly from $\frac{1}{5}$, segments rather narrow, second very long-pointed; light fuscous; cilia ochreous-whitish slightly tinged with fuscous.

BRAZIL, Sao Paulo; three specimens.

Ptcrophorus procontias, n. sp.

& Q. 18-20 mm. Head deep ochreous, lower edge of face and anterior half of crown white. Palpi deep ochreous. Antennæ whitish. Thorax whitish, tinged or sprinkled with pale ochreous. Abdomen whitish, longitudinally striped with ochreous. Legs white, anterior and middle femora and tibiæ lined with blackish. Fore-wings cleft from beyond middle, segments moderately broad, acute, apex of second produced, subfalcate; white, irregularly suffused with pale ochreous; a narrow dark fuscous streak along costa from base to $\frac{2}{3}$; an indistinct blackish dot in disc before $\frac{1}{3}$; a larger blackish dot beneath base of cleft; a black dot on costa at $\frac{5}{6}$, one on lower margin of first segment at $\frac{3}{4}$ of its length, and two on dorsum at $\frac{1}{2}$ and $\frac{3}{4}$ of second segment: cilia whitish-ochreous, becoming fuscous on outer half except on costa and beneath a blackish bar at apex of second segment. Hind-wings cleft firstly from 2 secondly from 1; grey, third segment whitish-ochreous; cilia whitish-ochreous, becoming light fuscous on outer half.

ASSAM (Khasi Hills), from April to September; twenty specimens.

Pterophorus sematias, n. sp.

 \bigcirc 21 mm. Head ochreous-brown, lower edge of face and anterior half of crown white. Palpi fuscous, beneath whitish. Antennæ grey. Thorax ochreous-whitish. Abdomen whitish, with traces of pale ochreous streaks, a dorsal series of minute black dots, and a rather dark fuscous ventral streak. Legs whitish, middle tibiæ and first joint of tarsi lined with blackish (others broken). Fore-wings cleft from beyond middle, segments moderately broad, pointed, apex of second acutely produced ; ochreous-white, partially suffused with pale ochreous, with a few scattered black scales, especially along costa anteriorly and on second segment ; a slender dark fuscous streak along costa from base to cleft ; a black dot in disc before $\frac{1}{3}$; a strong curved oblique black mark running round base

496

Descriptions of Pterophorida and Orneodida. 497

of cleft and extending shortly into first segment; a strong black mark along costa immediately beyond this, followed by two black costal dots; a black dot on lower margin of first segment at $\frac{3}{4}$ of length; some grey and black irroration round apex of second segment: cilia ochreous-whitish, on costa with two dark grey spots, on lower margin of first segment with broad grey patch beyond middle and blackish subapical patch, towards apex of second segment dark grey on both margins, otherwise on dorsum pale fuscous. Hind-wings cleft firstly from $\frac{2}{5}$, secondly from $\frac{1}{5}$; rather dark grey; cilia grey.

CEYLON (Maskeliya), in October (Alston); one specimen.

Pterophorus lienigianus, Z.

P. serindibanus, Moore ("Lep. Ceyl." iii, 527, pl. CCIX, 14) is a synonym of this species; it is common in India and Ceylon, and though the specimens show a little individual variation in intensity of marking, I am unable to find any specific difference between European and Indian examples.

Pterophorus chlorias, n. sp.

𝔅 ♀. 22-25 mm. Head pale yellow-ochreous, a band below forehead, and crown between antennæ and collar fuscous. Palpi pale yellow-ochreous, apex infuscated. Antennæ pale ochreous, shortly ciliated. Thorax and abdomen pale yellowish-ochreous. Legs yellow-whitish, anterior and middle femora and tibiæ dark fuscous beneath. Fore-wings cleft from $\frac{3}{2}$, segments moderately broad, first pointed, termen of second straight, very oblique; light brownishochreous, often more or less suffused with whitish-ochreous, especially along costa, sometimes sprinkled with fuscous in disc anteriorly and towards base of first segment; a small dark fuscous spot on base of cleft; cloudy dark fuscous dots on first segment at apex and extremity of 7, and on second at extremities of veins 2-4: cilia whitish-ochreous. Hind-wings cleft firstly from $\frac{2}{5}$, secondly from $\frac{1}{4}$, segments narrow, long-pointed; grey: cilia whitish-greyochreous.

COLORADO, U.S., 5,000 feet; three specimens.

Pterophorus glaphyrotes, n. sp.

3 Q. 19-23 mm. Head light ochreous-brown, between autennæ ochreous-white. Palpi whitish, with an ochreous lateral streak.

Antennæ and thorax ochreous-whitish. Abdomen whitish, with more or less indicated fine ochreous dorsal and other lines. Legs white, anterior and middle femora and tibiæ lined with dark fuscous. Fore-wings cleft from $\frac{\pi}{2}$, segments rather broad, first acutely pointed, second with termen very oblique; ochreouswhitish, more or less partially tinged with pale yellowish-ochreous, sometimes sprinkled with deeper ochreous; a more or less defined streak of pale brownish-ochreous suffusion beneath costa from near base, slender anteriorly, wider on first segment and becoming obsolete towards apex: cilia pale whitish-ochreous. Hind-wings cleft firstly from $\frac{\pi}{6}$, secondly from $\frac{\pi}{6}$, segments moderate, first pointed, second acutely pointed; rather light grey; cilia whitishochreous, sometimes partially tinged with grey.

BRAZIL, Sao Paulo; ARGENTINA, Parana; four specimens.

Pterophorus stadias, n. sp.

3 9. 20-23 mm. Head ochreous-brown, between antennæ white. Palpi white, with a brown lateral stripe. Antennæ ochreouswhitish, with a dark fuscous line, in & rather strongly ciliated. Thorax and abdomen ochreous-whitish. Legs whitish, anterior and middle femora and tibite lined with blackish, posterior tibite with grey dots at origin of spurs. Fore-wings cleft from 3, segments broad, first pointed, termen of second rather strongly oblique; pale whitish-ochreous, in 2 more whitish, more or less sprinkled with dark fuscous; some brownish suffusion towards costa posteriorly, in 9 more ochreous and forming a distinct sub-costal streak; a conspicuous blackish-fuscous dot at base of cleft beneath; a small fuscous mark on costa somewhat beyond this, in Q obsolete; two blackish-fuscous dots on costa between this and apex, and a third almost at apex; blackish dots at extremities of veins 1b, 2, 3, and 7: cilia whitish-ochreous, with patches of fuscous suffusion on vein 7 and beneath apex of first segment, and at apex of second. Hindwings cleft firstly from beyond $\frac{2}{5}$, secondly from $\frac{1}{5}$, segments moderate, first pointed, second long-pointed; pale ochreous-grey; cilia whitish-ochreous.

BRAZIL, Petropolis; four specimens.

Petrophorus oxyntes, n. sp.

 3° Q. 16-21 mm. Head ochreous-brown, between antennæ white. Palpi slender, white, with an ochreous-brown lateral stripe. Antennæ whitish, with indistinct dark line above, in 3° shortly ciliated.

Descriptions of Pterophoridæ and Orneodidæ. 499

Thorax whitish, sometimes more or less tinged with ochreous. Abdomen whitish-ochreous, base sometimes whitish, with dorsal and lateral series of blackish dots on edges of segments. Legs whitish, anterior and middle femora and tibiæ and basal joint of tarsi lined with dark fuscous. Fore-wings cleft from $\frac{2}{3}$, segments rather broad, first pointed, termen of second very oblique; whitishochreous, partially tinged or sprinkled with brownish, and strewn with scattered blackish-fuscous scales, usually more or less mixed with whitish suffusion; a blackish-fuscous dot on costa beyond middle of first segment, one just before apex, and one on lower margin of segment between these; minute blackish-fuscous dots at extremities of veins 1b and 2-4: cilia whitish-ochreous, beneath apex somewhat infuscated. Hind-wings cleft firstly from $\frac{2}{5}$, secondly from $\frac{1}{5}$, segments moderate, first pointed, second very acute, subfalcate; pale ochreous-grey; cilia whitish-ochreous.

BRAZIL, Sao Paulo; seven specimens.

Pterophorus spermatias, n. sp.

3. 16-17 mm. Head ochreous-brown, between antennæ whitish. Palpi whitish, with dark fuscous lateral line. Anteunæ whitish, towards base with dark line above, moderately ciliated. Thorax ochreous-whitish, tinged or sprinkled with brownish. Abdomen ochreous-whitish, with dorsal series of blackish dots on segmental margins. Legs whitish, anterior and middle femora and tibiæ and basal joint of tarsi lined with dark fuscous, posterior tibiæ with dark grey apical dot. Fore-wings cleft from 3, segments broad, first pointed, termen of second very oblique; whitish-ochreous mixed with whitish and brownish, and irregularly sprinkled with dark fuscous; traces of a small cloudy dark fuscous spot in disc at $\frac{1}{3}$, and a more distinct one above base of cleft; two small dark fuscous costal spots about middle and 3 of first segment, a dark fuscous dot on its lower margin near apex, and one at apex; dark fuscous dots at extremities of veins 3 and 4: cilia whitish. fuscous. Hind-wings cleft firstly from ²/₅, secondly from ¹/₅, segments moderate, first pointed, second long-pointed, acute ; grey ; cilia light grey.

BRAZIL, Sao Paulo; three specimens.

Pterophorus nivalis, n. sp.

 3° Q. 22-24 mm. Head ochreous sprinkled with whitish, upper half of face brown edged beneath with whitish. Palpi ochreous-

fuscous, becoming whitish towards base. Antennæ ochreous. Thorax brownish-ochreous, anteriorly more or less suffused with whitish. Abdomen brownish-ochreous, base and an interrupted lateral streak white. Legs white banded with ochreous. Forewings cleft from 3, segments moderate, first pointed, termen of second very oblique; brownish-ochreous, irregularly and variably sprinkled and mixed with white, and sprinkled with dark fuscous; an irregular undefined streak of dark fuscous suffusion beneath middle from base almost to cleft, where it is sharply limited by an oblique white mark on base of cleft, upper edge of this streak with a projection at 1 of wing; a small white spot on costa above base of cleft, and a larger spot at $\frac{1}{3}$ of first segment, obliquely directed towards and tending to be connected with the white mark on cleft; costa between these spots suffused with dark fuscous, and a similar patch beyond second spot; a white streak along lower margin of first segment from about $\frac{1}{3}$ to near apex, edged above anteriorly by a dark fuscous dash; a narrow white streak along lower margin of second segment from beneath cleft to near apex, and one or two short white streaks towards termen running into this : cilia whitish-ochreous, on costa whitish towards apex, on lower margin of first segment mixed with grey, beneath apex with a blackish-grey patch edged beneath with white, on second segment grey on upper margin and at tornus, and with blackish-grey patches at apex and middle of termen separated with white. Hind-wings cleft firstly from 2/5, secondly from 1/6, segments moderate, longpointed; grey; cilia pale greyish-ochreous, more whitish towards tips.

JAMAICA, Newcastle; four specimens.

Pterophorus acrias, n. sp.

 3° Q. 24-27 mm. Head white, irrorated with dark fuscous except between antennæ. Palpi white irrorated with dark fuscous. Antennæ white ringed with dark fuscous. Thorax white, thinly sprinkled with fuscous. Abdomen brownish mixed with dark fuscous. Legs white, femora and tibiæ irrorated with dark fuscous, tips of tarsal joints dark fuscous. Fore-wings cleft from before $\frac{2}{3}$, first segment rather narrow, acute, second much broader, acutepointed; brownish, sprinkled with dark fuscous, costal half more or less suffused with white irroration, dorsal half somewhat sprinkled irregularly with white; a suffused white spot above dorsum at $\frac{1}{3}$; a suffused white spot on base of cleft, edged anteriorly by a curved oblique mark of dark fuscous suffusion; an elongate blackish mark

Descriptions of Pterophoridæ and Orneodidæ. 501

along costa above base of cleft, and two shorter blackish costal marks posteriorly : cilia white, on costa dark fuscous on markings, and on an apical patch except at tips, on lower margin of first segment wholly dark fuscous except a white bar on vein 7, on upper margin of second segment fuscous, round its apex dark fuscous except at tips, on dorsum and termen with three undefined patches of pale fuscous suffusion. Hind-wings cleft firstly from $\frac{2}{5}$, secondly from $\frac{1}{5}$, segments moderate, long-pointed ; rather dark fuscous ; cilia fuscous, with an ochreous gloss.

COLORADO, U.S., 5,000-7,000 feet; three specimens. Very similar superficially to *inquinatus*, but larger, with the first segment of fore-wings much narrower in proportion to second, the white irroration chiefly on costal half (in *inquinatus* distributed evenly throughout), no apparent dark spot in disc anteriorly, and two distinct similar dark marks on costa posteriorly, whereas in *inquinatus* there is only one conspicuous posterior mark and sometimes a minute additional dot.

Pterophorns chionastes, n. sp.

& Q. 24-27 mm. Head, palpi, antennæ, thorax, abdomen, and legs white; thorax sometimes with a broad whitish-ochreous central stripe; abdomen sometimes mostly suffused with whitish-ochreous. Fore-wings cleft from 3, first segment moderate, long-pointed, second obviously broader, shorter-pointed; pale fuscous, mostly suffused with white, less strongly towards costa, with some scattered dark fuscous scales; a small cloudy dark fuscous spot in disc at 1; an oblique dark fuscous mark before cleft, preceded by some fuscous suffusion, a dark fuscous mark along costa above base of cleft, and sometimes a small dark fuscous mark between these; a short undefined dark fuscous mark beneath cleft; a suffused dark fuscous mark along costa at 5; sometimes traces of dark fuscous dots at extremities of veins 2-4, 7, and 8: cilia white, within cleft and on dorsum more or less suffused with brownish. Hind-wings cleft firstly from $\frac{2}{5}$, secondly from $\frac{1}{5}$, segments rather narrow, second longpointed ; grey, third segment paler ; cilia grey or pale grey, with a brassy tinge.

COLORADO, U.S., 5,000-7,000 feet; four specimens.

Pterophorus glochinias, n. sp.

3 Q. 26-28 mm. Head ochreous-whitish, more or less irrorated with fuscous or dark fuscous except on anterior half of crown.

Palpi ochreous-whitish, sprinkled with dark fuscous except towards apex. Antennæ ochreous-whitish, with a cloudy fuscous line above. Thorax pale whitish-ochreous finely sprinkled with fuscous. Abdomen ochreous-whitish, more or less sprinkled with fuscous on sides, sometimes with dark lateral stripes towards base. Legs ochreouswhitish, anterior and middle pairs obliquely banded and lined with dark fuscous, posterior pair narrowly banded with dark fuscous suffusion. Fore-wings cleft from 3, segments moderate, first pointed, second with apex slightly produced, termen very obliquely sinuate; pale whitish-ochreous slightly tinged with brownish, more or less thinly and finely sprinkled with dark fuscous; an indistinct dark fuscous dot in disc beyond $\frac{1}{4}$; a triangular dark fuscous spot resting on base of cleft, its angles shortly produced on each side of cleft; a cloudy dark fuscous dot beyond upper angle of this, and a dark fuscous mark on costa beyond this dot, preceded and followed by some whitish suffusion; a blackish dot on costa beyond middle of first segment, one at apex, and one on lower margin midway between these : termen of first segment suffused with whitish, with a suffused dark fuscous mark beneath costal dot; more or less irregular dark fuscous suffusion towards apex; second segment with more or less dark fuscous suffusion on upper margin towards apex, and suffused dark fuscous dots on extremities of veins 2-4: cilia pale whitishochreous, partially tinged with brownish, beneath apex of each segment suffused with dark fuscous. Hind-wings cleft firstly from 2, secondly from 1, segments narrow, long-pointed; grey; cilia ochreous-grey.

BRAZIL, Petropolis; four specimens. Much like *lithodactylus*, but segments of hind-wings much narrower; distinguished from both *lithodactylus* and *Constanti* by the dark fuscous mark on lower margin of first segment opposite costal dot.

Pterophorus citrites, n. sp.

 3° Q. 24-27 mm. Head ochreous-whitish, face and back of crown more ochreous-tinged. Palpi and antennæ whitish-ochreous. Thorax whitish-ochreous, patagia sometimes more whitish. Abdomen whitish-ochreous, sides more ochreous. Legs ochreous-whitish, auterior and middle femora and tibiæ ochreous. Fore-wings cleft from $\frac{2}{3}$, first segment moderate, long-pointed, second much broader, shorter-pointed; ochreous, partially tinged with whitish; an undefined patch of light brownish suffusion with a few dark fuscous scales towards dorsum about $\frac{1}{4}$; a small spot of similar suffusion in disc at $\frac{1}{3}$; an oblique dark fuscous mark a little before base of cleft,

Descriptions of Pterophorida and Orneodida. 503

preceded by some yellow-brownish suffusion which is extended upwards as an indistinct oblique streak to costa above base of cleft, posteriorly edged with white suffusion; a short longitudinal streak of yellowish-brown suffusion sprinkled with dark fuscous in apex of second segment, and another less distinct and sometimes obsolete beneath apex of wing: eilia whitish, beneath apex with a pale ochreous patch, within eleft tinged with ochreous and on upper margin of second segment with fuscous, on dorsum tinged with whitish-ochreous. Hind-wings cleft firstly from before middle, secondly from $\frac{1}{4}$, segments rather narrow, second long-pointed; grey, sometimes much suffused with whitish-ochreous; eilia whitishochreous-grey or whitish-ochreous.

COLORADO, U.S., 5,000-7,000 feet; three specimens.

Pterophorus balanotes, n. sp.

3. 31 mm. Head light ochreous-brown, space between antennæ ochreous - whitish. Palpi ochreous - whitish. Antennæ whitish. Thorax ochreous-whitish. Abdomen pale whitish-ochreous with some dorsal and lateral blackish dots. Legs ochreous-whitish, (anterior pair broken,) middle femora infuscated and tibiæ streaked with dark fuscous, posterior coxæ with a blackish dot near base. Fore-wings eleft from ²/₃, segments moderately broad, first pointed, termen of second nearly straight, very oblique; whitish-ochreous, brownish-tinged in disc; some blackish irroration somewhat suffused with brown forming a fine subcostal streak from near base to middle, a very undefined broad median streak from 2 to near eleft, a broad cloudy submedian streak from base to $\frac{2}{5}$, a small spot on base of cleft, and indications of a short dash in middle of first segment; cloudy dark fuseous dots at extremities of veins 2-4 and 7: cilia ochreouswhitish. Hind-wings cleft firstly from before middle, secondly from 1, segments moderate, pointed; pale ochreous-grey; cilia whitishgrey-ochreous.

S. FLORIDA, U.S., Titusville, in August; one specimen.

Pterophorus aquila, n. sp.

3. 42 mm. Head ochreous-brown, space between antennæ ochreous-whitish. Palpi whitish, becoming ochreous towards apex. Antennæ whitish-ochreous. Thorax brownish-ochreous, patagia ochreous-whitish. Abdomen whitish-ochreous. Legs whitish, anterior and middle femora and tibiæ fuscous beneath. Fore-wings cleft from $\frac{2}{3}$, first segment moderate, pointed, second broad, termen straight, oblique; pale brownish-ochreous; a fine dark fuscous line on vein 1b from near base to near middle; a small suffused dark fuscous spot on base of cleft, and a dot obliquely before and beneath it; extremities of all veins with dark fuscous dots: cilia whitishochreous, broadly barred on veins with a faint brownish tinge. Hind-wings cleft firstly from before middle, secondly from about 4, segments moderately broad, pointed; fuscous, third segment whitish-fuscous; cilia whitish-fuscous, base tinged with pale ochreous.

TEXAS, U.S.; one specimen. Much the largest species of the genus, exceeding grandis by 8 mm.

STENOPTILIA, Hb.

Stenoptilia petræa, n. sp.

3. 20-21 mm. Head and thorax greyish-ochreous, with a white line above eyes, thorax sometimes white-sprinkled. Palpi whitishochreous sprinkled with fuscous and whitish, base white beneath. Antennæ grey. Abdomen greyish-ochreous with suffused streaks of white irroration, becoming more defined towards base. Legs grey, anterior and middle pair white internally. Fore-wings cleft from 3, segments moderately broad, first evenly pointed, without lower angle, second with termen straight, very oblique; brownish-ochreous, becoming browner posteriorly, more or less sprinkled irregularly with whitish and blackish; a cloudy dark fuscous dot in disc at 1. and a more distinct one on base of cleft; cilia light brownishochreous, base mixed with whitish in cleft and on termen, with traces of dark fuscous dots at angles of segments and in middle of termen of second segment. Hind-wings cleft firstly from ²/₆, secondly from near base, first and second segments acutely pointed, apex of second produced ; rather dark grey ; cilia light greyish-ochreous.

S. INDIA, Palni Hills, 6,000 feet (*Campbell*); Nilgiri Hills, 6,000 feet (*Andrewes*); two specimens. Much like *bipunctidactyla*, but certainly distinct by shape of first segment of fore-wings, which is narrower and with lower margin straight to apex, so that there is no lower angle, which in *bipunctidactyla* is distinct.

Stenoptilia zophodactyla, Dup.

I have recently recorded this species as occurring not uncommonly in India, Ceylon and Eastern Australia, and

Descriptions of Pterophorida and Orneodida. 505

have since obtained several specimens from Parana, Argentina, which I regard as certainly identical. Mr. T. Bainbrigge Fletcher has bred the Ceylon form from *Sopubia trifida* (*Scrophulariaceæ*), and has sent me bred examples which appear quite normal. Doubtless it has more food plants than are at present known.

ORNEODIDÆ.

ORNEODES, Latr.

Orneodes nephclotoxa, n. sp.

J. 15-16 mm. Head, antennæ, and thorax white, face slightly sprinkled with grey. Palpi moderate, ascending, somewhat loosely scaled, terminal joint somewhat over half second; white, second joint somewhat sprinkled with grey. Abdomen whitish, sprinkled with dark fuscous on sides. Legs white, anterior tibiæ suffused with Fore-wings white, faintly tinged with fuscous; dark fuscous. anterior half of costa dark fuscous interrupted several times with white, posterior half with several indistinct fuscous marks; segments 2-6 crossed by a moderate fascia before middle and narrow one before ³/₄, whose margins only are indicated by blackish irroration : cilia white, on fasciæ light fuscous. Hind-wings white, faintly tinged with fuscous; a moderate grey fascia at 1, irrorated with blackish; a narrower fascia at 3, indicated by margins of blackish irroration, on first segment dilated and suffused with blackish ; dots of blackish irroration near tips of segments; cilia white, on fasciae more or less tinged or mixed with fuscous.

ASSAM (Khasi Hills); two specimens.

Orneodes pluvialis, n. sp.

Q. 13 mm. Head white, with grey bar on face, and bar of blackish grey irroration on crown. Palpi moderate, ascending, with appressed scales, terminal joint about $\frac{3}{4}$ of second; white, second joint externally grey. Antennæ whitish-ochreons. Thorax white. Abdomen white, with a blackish lateral mark on second segment, and some dots of dark fuscous irroration on sides. Legs white, anterior femora and tibiæ dark fuscous externally. Fore-wings white; first segment with about ten moderately broad fuscous bars edged with black irroration; segments 2-5 with six more or less broad fasciæ of fuscous irroration edged with black irroration, leaving narrow interspaces and a basal area; sixth segment with a black dot at $\frac{1}{4}$, a black fascia beyond middle, and two fasciæ of fuscous irroration edged with black on posterior fourth : cilia white, on fasciæ whitish-fuscous. Hind-wings as fore-wings, but first segment similar to 2-5, sixth with central black mark smaller.

ASSAM (Khasi Hills), in September; one specimen.

Orneodes tricausta, n. sp.

♂ 9. 14-16 mm. Head, palpi, antennæ, thorax, abdomen, and legs white ; face with a dark grey spot on each side beneath antennæ ; palpi moderate, curved, somewhat rough anteriorly, second and terminal joints each with basal and median dark grey spots, terminal joint rather shorter than second; abdomen sprinkled with blackish near base and towards apex; anterior tibiæ and tarsi mostly suffused with grey. Fore-wings white, thinly and irregularly sprinkled with dark grey; first segment with five small fuscous dark-edged spots on costa, a blackish bar before apex, and small dark fuscous apical spot ; other segments crossed by slender median and subterminal pale ochreous fasciæ edged with dark fuscous irroration, subterminal broadened and suffused with blackish on second and third segments, angulated inwards on third : cilia white, with grey bars on fasciæ. Hind-wings white, with scattered dots of dark fuscous irroration; narrow or very narrow pale ochreous median and subterminal fasciæ edged with dark fuscous irroration, median broader and more suffused with dark fuscons on sixth segment; cilia white, more or less barred with grey on fasciæ.

ASSAM (Khasi Hills), in October, November, and June; six specimens.

Orneodes pinalea, n. sp.

3 Q. 13-18 mm. Head white, crown more or less mixed with dark fuscous. Palpi moderately long, ascending, loosely scaled anteriorly, terminal joint half second; white, second joint externally more or less sprinkled with grey, terminal joint with a dark grey median band. Antennæ pale whitish-ochreous. Thorax white. Abdomen white, second segment with small blackish subdorsal spots, anal tuft of 3 whitish-ochreous. Legs white, anterior tibiæ suffused with dark grey. Fore-wings white; first segment with about ten pale yellowish spots partially edged with dark fuscous irroration, alternate ones more strongly suffused with dark fuscous; other segments crossed by six moderately broad pale yellowish fasciæ

506

Descriptions of Pterophoridæ and Orneodidæ. 507

edged with blackish irroration, fourth broadest, represented on sixth segment by a blackish spot: cilia white, on fasciæ pale yellowish. Hind-wings white; fasciæ mostly reduced to single dots of blackish irroration, but postmedian fascia faintly yellowish; sixth segment with three posterior dots only.

CEYLON (Madulsima, Wellawaya), in November (Polc, Green, Vaughan); four specimens.

Orncodes niphostrota, n. sp.

5 9. 21-22 mm. Head and thorax white tinged or sprinkled with pale ochreous. Palpi moderate, ascending, loosely scaled, terminal joint ³ of second; grey, terminal joint white towards apex. Antennæ pale whitish-ochreous. Abdomen whitish, with subbasal and subapical bands and lateral stripes of fuscous irroration. Legs whitish, anterior femora and tibiæ suffused with dark fuscous externally. Fore-wings white ; basal half tinged with ochreous and partially sprinkled with dark fuscous, especially on base of costa and towards base of lowest cleft; segments crossed by four fuscous fasciæ sprinkled with blackish, and an additional blotch on first two segments between third and fourth fasciæ, the blotch and upper half of second fascia darker than the rest, first three fasciæ moderate, angulated on fourth segment, first obsolete towards costa, third narrow on fourth and fifth segments, fourth narrow throughout, subapical, all widely separated on sixth segment : cilia ochreous-whitish. slightly tinged with fuscous on fasciæ. Hind-wings white ; basal third irrorated with dark fuscous except at base; segments crossed by four rather narrow curved or angulated fuscous fasciæ sprinkled with blackish; cilia as in fore-wings,

CEYLON (Maskeliya), in October and January (de Mowbray, Alston); two specimens.

Orneodes chloracta, n. sp.

Q. 16 mm. Head ochreous-whitish. Palpi long, whitish, second joint somewhat rough-scaled above and towards apex beneath, sprinkled with grey, terminal joint porrected, hardly over half second, with grey median ring. Thorax and abdomen ochreouswhitish sprinkled with dark fuscous. Fore-wings ochreous-whitish, sprinkled with fuscous except on first segment; basal area sprinkled with dark fuscous; three small semi-oval fuscous spots on anterior half of costa; segments 2-6 crossed by two broad slightly curved fascize of fuscous irroration before middle of wing and about $\frac{2}{3}$, and a slender fascia before apex of segments, these fascize edged with indistinct whitish dots; fourth segment with an apical dark fuscous dot: cilia ochreous-whitish, more or less mixed irregularly with fuscous, on margins of fasciæ dark fuscous mixed with whitish, on first segment ochreous-whitish with dark fuscous patches on lower margin opposite fasciæ. Hind-wings ochreous-whitish sprinkled with blackish; moderate curved fasciæ of fuscous irroration at $\frac{1}{2}$ and $\frac{2}{3}$, edged with white dots, and slender indistinct subapical fascia; dark fuscous dots at apex of segments except first; cilia ochreouswhitish, mixed with fuscous, and on fasciæ with dark fuscous.

BENIN (Wari), in September; one specimen.

Orneodes mesolychna, n. sp.

 \mathcal{E} Q. 9-11 mm. Head ochreous-whitish, crown suffusedly mixed with blackish-grey. Palpi moderate, curved, ascending, transverseflattened, terminal joint somewhat shorter than second; whitish, with apical band of second joint and median band of terminal joint blackish-grey. Anteunæ ochreous-white. Thorax ochreous-whitish mixed with blackish-grey. Abdomen rather dark fuscous, third segment ochreous-white, segments 4-6 edged posteriorly towards middle with white, towards sides with black, ventral surface ochreouswhite. Legs whitish, anterior femora and tibiæ suffused with dark grey externally, apex of middle femora with a dark grey dot. Forewings ochreous-yellow; basal area irrorated with blackish; a moderate fascia of blackish irroration edged with white before $\frac{1}{4}$; first segment with three, other segments crossed by two rather broad fasciæ of blackish irroration edged by white lines margined with two rows of black scales; a slender blackish subapical fascia, and tips of segments also blackish : cilia dark grey, barred with whitish on white markings. Hind-wings whitish, with about ten irregular transverse bars of blackish irroration, alternate interspaces ochreousyellowish; cilia as in fore-wings, but whitish bars wider.

ASSAM (Khasi Hills); CEYLON (Maskeliya), (*Polc*): from November to March, seven specimens. Much like *spilodesma*, but smaller, and immediately distinguished by the conspicuous white third segment of abdomen.

Orneodes spilodesma, n. sp.

3 Q. 14-16 mm. Head pale yellowish, with three transverse bars of blackish irroration on crown and two on face. Palpi moderately long, curved, second joint rough-scaled towards middle above

508

Descriptions of Pterophoridæ and Orneodidæ. 509

and towards apex beneath, terminal joint rather thick, $\frac{3}{4}$ of second; whitish-ochreous, second joint with two sometimes confluent bands of blackish irroration, terminal joint with extreme base and a median band blackish. Antennæ ochreous-whitish, towards base with some black scales above. Thorax pale yellowish, with two transverse bands or sometimes wholly suffused with dark fuscous irroration. Abdomen pale yellowish suffusedly irrorated with dark fuscous, segmental margins ochreous-whitish towards middle, spotted with blackish on each side of this. Legs white, anterior pair more or less grey externally, apex of middle femora grey. Fore-wings ochreous-yellow, sometimes sprinkled or wholly irrorated with dark fuscous; basal third more or less irrorated and spotted with dark fuscous; costa with six moderately broad dark fuscous spots edged by oblique white marks, and a seventh at apex; segments 2-5 crossed by two irregular fasciæ of dark fuscous irroration, edged by white lines margined with black irroration, first median, rather curved inwards in middle, broadest on fifth segment, second subterminal, curved inwards in middle, broadest on segments 2-4; blackish dots at tips of segments : cilia whitish, barred with dark fuscous, with broader dark fuscous bands on fasciæ. Hind-wings pale yellowish ; basal area irrorated with dark fuscous ; segments with about eight bars of blackish irroration, alternate interspaces more whitish; fifth segment with two remote and sixth with two approximated bands of dark fuscous irroration; cilia whitish, barred with dark fuscous, with broader dark fuscous spots on bands of fifth and six segments.

S. INDIA, Gooty (*Campbell*); ASSAM, Khasi Hills; from June to November, sixteen specimens. The variation in development of the dark fuscous irroration causes some diversity of appearance.

Orneodes huebneri, Wallgr.

TRANSVAAL, Pretoria (*Janse*); KASHMIR, 6,000 feet. The length of terminal joint of palpi varies somewhat, and in both of these forms is usually somewhat shorter than in European specimens, and perhaps rather more thickly scaled, but there appears to be no constant or definable difference, either in structure or markings. In one Transvaal specimen (out of six) the subterminal fascia is simple on costa and not furcate as usual, certainly an abnormality only, but noticeable.

Mr. E. Meyrick's Notes and

Orneodes magadis, n. sp.

& Q. 14-16 mm. Head, palpi, and thorax fuscous-whitish mixed with fuscous and dark fuscous; palpi long, porrected, second joint long, with projecting scales above and towards apex beneath, terminal joint about half second, porrected, mostly concealed in tuft of second joint, white with dark fuscous median ring. Antennæ fuscous. Abdomen whitish mixed with dark fuscous, segmental margins white. Legs ochreous-whitish suffusedly banded with Fore-wings fuscous-whitish, suffusedly intorated with fuscous. fuscous, sometimes tinged with ochreous; basal area irrorated with dark fuscous; six dark fuscous slenderly white-edged subquadrate spots on costa, last five crossing first segment, last two united beneath as continuation of subterminal fascia; segments 2-6 crossed by median and subterminal moderately broad dark fuscous fascize slenderly edged with white, both sinuate inwards on third and fourth segments, median broadest on fifth segment, subterminal on third and fourth; all segments with an apical black dot; cilia fuscous, with whitish bars on margins of fasciæ. Hind-wings whitish irrorated throughout with dark fuscous, with several more or less defined white bars, sometimes edged with blackish irroration; apex of all segments with black dots; cilia whitish, with about ten grey bars on each segment, pairs before middle and about ²/₄ enclosing lighter grey fasciæ.

ASSAM (Shillong), in March; six specimens.

Orneodes eancellata, n. sp.

3 Q. 15-16 mm. Head ochreous-white. Palpi long, curved, second joint with projecting scales above and strong projecting tuft beneath, terminal joint as long as second, slender, acute; white, second joint pale ochreous sprinkled with fuscous except on margins. Antennæ white ringed with dark fuscous. Thorax ochreous-white, with two small dark fuscous spots behind collar. Abdomen ochreouswhitish, with two series of small dark fuscous spots on margins of segments, those on second segment larger and blacker. Legs whitish. Fore-wings white; four subquadrate fuscous spots edged with black on anterior half of costa, with smaller indistinct fuscous spots between these, basal third of wing otherwise irregularly spotted with fuscous, with some dots of blackish scales; irregular postmedian and subterminal fasciæ of suffused fuscous irroration edged with blackish, both sinuate inwards on third segment, subterminal bifurcate on first segment; between these a small semioval fuscous

Descriptions of Pterophoridæ and Orneodidæ. 511 -

black-edged spot on costa, and a faint fuscous-tinged dark-edged narrower fascia on other segments, attenuated or obsolete on fourth segment; a blackish dot at apex of each segment, and on segments 3-6 a fuscous dot a little before it : cilia white, barred with fuscous on dark markings. Hind-wings white; basal area ochreous-tinged and spotted with dark fuscous; three fasciæ as in fore-wings, but intermediate one darker and entire; all segments with blackish apical and preceding fuscous dots; cilia as in fore-wings.

SYRIA (Alma Dagh); two specimens.

A'DDENDUM.

Pterophirus orchatias, n. sp.

♂. 21 mm. Head brownish, between antennæ ochreous-white. Palpi whitish, with a blackish lateral line. Antennæ pale greyishochreous, above white, towards base with a blackish line. Thorax whitish-yellow. (Abdomen broken.) Legs yellow-whitish, femora and tibiæ lined with dark fuscous. Fore-wings cleft from $\frac{3}{2}$, segments moderate, pointed; light ochreous, in disc with a few scattered dark fuscous specks; a small irregular blackish spot on base of cleft, emitting a short oblique strigula upwards; groups of black scales at extremities of veins 8, 10, and 11, and strong black marks at extremities of veins 7 and 2-4: cilia light ochreous, more whitish at tips. Hind-wings cleft firstly from $\frac{2}{5}$, secondly from $\frac{1}{5}$; grey; cilia light grey, tinged with ochreous.

NATAL, Durban, in October (Leigh); one specimen.

FEBRUARY 14, 1908.

TRANS. ENT. SOC. LOND. 1907.-PART IV. (FEB. '08.) 34